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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/136,483	08/19/98	KUMAR	S N19.12-0016

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IMS1/0319

EXAMINER

MARCHESCHI, M

ART UNIT

PAPER NUMBER

1755

DATE MAILED: 03/19/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/136,483

Applicant(s)
Kumar et al.

Examiner
Michael Marcheschi

Group Art Unit
1755



☐ Responsive to communication(s) filed on _____

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-20 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-20 is/are rejected.

☒ Claim(s) 1, 10, and 19 is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☒ The drawing(s) filed on Aug 19, 1998 is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 5,6

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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The use of the trademarks 'PYREX' (page 7, line 6), 'SWAGelok' (page 7, line 23), 'WARING' (example 3) and any other trademarks have been noted in this application. They should be **CAPITALIZED** wherever they appear and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

The disclosure is objected to because of the following informalities:

Throughout the specification applicants define application serial numbers and these should be updated to include the patent numbers, if appropriate,.

On page 29, applicants define a copending application but do not set forth a serial number.

Appropriate correction is required.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description:

In figure 2, number '131' is not defined in the specification. On page 10, line 4, applicants set forth a 'duct 132' but should this number be 131?

In figure 4, number '317' is not defined in the specification.

Correction is required.

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Claims 1, 10 and 19 are objected to because of the following informalities:

In claim 1, line 2, the phrase 'particle having' should be changed to '**particles have**'.

In claim 10, line 2, the **second occurrence** of 'aluminum oxide' should be canceled.

In claim 19, line 2, the phrase 'particle having' should be changed to '**particles have**'.

Appropriate correction is required.

Claim 1-16 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 4 and 5 are indefinite as to the phrase 'effectively no' since the examiner is unclear as to what this encompasses. This phrase does not define a clear limitation, thus rendering the scope of the claims unclear. This phrase should be canceled.

Claim 15 is indefinite because the phrase 'comprising a composition selected from the group consisting of' does not define the claimed invention in proper Markush terminology. This phrase should be changed to '**selected from the group consisting of**'.

The other claims are indefinite because they depend on indefinite claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-8 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over either (1) Sugoh et al., (2) Hardy et al., (3) Ota et al., (4) Arai et al, (5) Moser or (6) Helble et al. (708).

Sugoh et al. teach in the claims, alumina particles that can have a size of 0.1 micron.

Hardy et al. teach in column 2, lines 10-11 and column 3, line 40, alumina particles having a size of between 0.02-0.06 microns.

Ota et al. teach in the abstract, alumina particles having a size of between 10-100 nm.

Arai et al. teach in column 2, lines 1-15 and column 3, line 47, alumina particles having a size of between 20-500 nm.

Moser teaches in column 5, lines 23-27, alumina particles having a size of between 1-30 nm.

Helble et al. (708) teach in claims 1-5, alumina particles having a size of less than 100 nm.

All the references teach alumina particles having a size within the claimed range and therefore no distinction is seen to exist because the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have

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been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549. In addition, the broad interpretation of alumina defined by the references broadly encompasses any alumina form.

Claims 1-16 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over either (1) Sakatani et al. alone or in view of Ueda et al. (2) Ueda et al., (3) Atsugi et al. alone or in view of Ueda et al., (4) Rosenblum alone or in view of Ueda et al., (5) Zipperian alone or in view of Ueda et al., (6) Rostoker (130) alone or in view of Ueda et al., (7) Rostoker et al. (194) alone or in view of Ueda et al., (8) Wang alone or in view of Ueda et al. or (9) Neville et al. alone or in view of Ueda et al.

Sakatani et al. teach in the abstract and column 3, lines 40-41, a polish comprising at least one abrasive oxide selected from alumina and silica, wherein the size of the abrasive is between 0.1-1.5 microns.

Ueda et al. teach in the abstract and column 3, line 2, a polish comprising at least one abrasive oxide selected from alumina and silica, wherein the size of the abrasive is between 0.2-1 micron.

Atsugi et al. teach in column 3, lines 9-20, a polish comprising alumina having a size of 40 nm or less.

Rosenblum teach in column 2, lines 21-43, a polish comprising alumina having a size of between 0.05-1 micron. It is also shown that silica can be added to the polish.

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Zipperian teach in the abstract and column 4, lines 25-30, a polish comprising a mixture of silica and alumina abrasives, wherein the alumina has a size or between 0.5-5 microns.

Rostoker (130) teach in the abstract, a polish comprising alumina having a size of between 20-200 nm.

Rostoker et al. (194) teach in column 4, lines 12-24, a polish comprising alumina or silica having a size of between 30-100 nm.

Wang et al. teach in the abstract and column 4, lines 33-34, a polish comprising a mixture of silica and alumina abrasives, wherein the abrasives have a size below 1 micron.

Neville et al. teach in the abstract, column 4, lines 45-47 and column 6, lines 6-10, a polish comprising a metal oxide abrasives (alumina or silica), wherein the abrasives have size less than 0.3 micron.

All the references teach polishes comprising alumina particles having a size within the claimed range and therefore no distinction is seen to exist because the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549. In addition, the broad interpretation of alumina defined by the references broadly encompasses any alumina form. With respect to the additional abrasive (silica) all the references except Atsugi et al., Rostoker (130), Rostoker et al. (194) and Neville et al. teach that silica can be used and therefore no distinction is seen to exist. Although the references set forth

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above fail to teach the use of this component, it is the examiners position that one skilled in the art would have found it obvious to use silica in combination with alumina in the above references because it is prima facie obvious to combine two or more materials disclosed by the prior art to form a third material that is to be used for the same purpose (i.e. a combination of abrasives). In re Kerkhoven 205 USPQ 1069. Finally, with respect to the use of a nonaqueous solvent as the dispersing medium, it is the examiners position that, in any of the references that fail to disclose this feature, said feature is an obvious modification thereof and one skilled in the art would have routinely known that either water or another solvent (nonaqueous) can be used as the dispersing medium. In the alternative, Ueda et al. teach in column 4, lines 40-43 that this concept is well known (either medium can be used).

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimo.

Shimo teaches in column 5, lines 11-18, column 8, lines 18-21 and the claims, a process for making a metal oxide having a size less than 0.3 micron comprising laser pyrolysis of a mixture of an organometallic precursor (aluminum) and an oxygen containing compound.

The reference teaches a method of making aluminum oxide which comprises all of the claimed steps and therefore no significant difference is seen to exist in the absence of any evidence showing the contrary. With respect to the oxygen containing compound, it is the examiners position that the broad interpretation of this compound can be (act as) both an oxidizer and absorber (i.e. ozone) and therefore no distinction is seen to exist. With respect to the size of the

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oxide, the reference teaches sizes within the claimed range and therefore no distinction is seen to exist because the subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness, see *In re Malagari*, 182 U.S.P.Q. 549.

Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over either (1) Sugoh et al., (2) Hardy et al., (3) Ota et al., (4) Arai et al, (5) Moser, (6) Helble et al. (708), (7) Sakatani et al., (8) Ueda et al., (9) Atsugi et al., (10) Rosenblum, (11) Zipperian, (12) Rostoker (130), (13) Rostoker et al. (194), (14) Wang or (15) Neville et al. as applied to claim 1 above, and further in view of Shimo.

It is the examiners position that it would have been obvious to make the aluminum oxide particles defined by any of the above references by the method disclosed by Shimo because Shimo teaches a well known conventional way to make aluminum oxide particles. In view of this, one skilled in the art would have found it extremely obvious to manufacture aluminum oxide particles using **any** conventional method and therefore no distinction is seen to exist.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

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F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-16 and 19-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3, 5-9 and 11-16 of copending Application No. 08/961,735. Although the conflicting claims are not identical, they are not patentably distinct from each other because the reduction to practice of the claims according to the copending application would render obvious the instant claims. Although the claims according to the copending application do not set forth the specific abrasive particles in the polish, the broad interpretation of the claims encompasses any and all well known abrasive particles used in polishes. In view of this, it is the examiners position that alumina and silica are encompassed by the broad claims in the absence of any evidence showing the contrary

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

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"A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548.

Evidence of unexpected results must be commensurate in scope with the subject matter claimed.

In re Linder 173 USPQ 356.

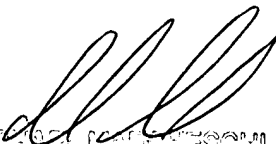
The additional references on the 1449 have been cited as art of interest since they are cumulative to or less than the art relied upon in the rejections above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Marcheschi whose telephone number is (703) 308-3815. The examiner can be normally be reached on Monday through Thursday between the hours of 8:30-6:00 and every other Friday between the hours of 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Mark L. Bell, can be reached at (703) 308-3823.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Michael Marcheschi
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3/16/99



MICHAEL MARCHESCHI
PATENT EXAMINER